APPENDIX D2 – VISUAL CONTRAST RATING WORKSHEETS

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location**	Location Sketch
SunZia Southwest Transmission Project	Township: 2S	
Key Observation Point: SO17 State Route 408 (El Camino Real)	Range: 1W	
VRM Class: IV	Section: 25	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat to triangular/geometric	FG: Low patches, strips	FG: Thin vertical, geometric
Line	FG: Curving bands, horizontal, diagonal	FG: Butt and transitional edges	FG: Vertical, horizontal, diagonal
Color	FG: Light browns, and gray	FG: Light to dark green, sage, golden, brown	FG: Brown, tan, grey, white
Texture	FG: Fine to medium grain	FG: Uneven medium grain and density	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Flat to triangular/geometric	FG: Low patches, strips,	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Horizontal	FG: Butt and transitional edges	FG: Complex, angular; concave, horizontal
Color	FG: Light browns, and gray	FG: Light to dark green, sage, golden, brown	FG: Dull gray
Texture	FG: Fine to medium grain	FG: Uneven medium grain and density	FG: Fine grain, matted, uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x	x			
	Texture				x				x	x			

Does project design meet visual resource management objectives?
Yes

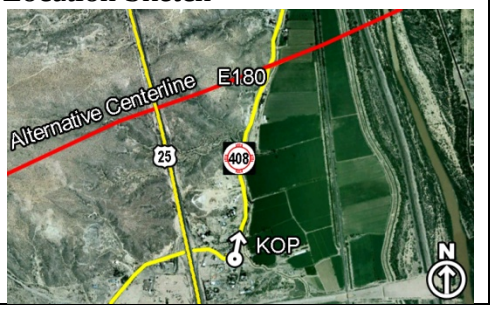
Additional mitigating measures recommended?
Yes – See Simulation 8

Evaluators Names:
EPG Visual Personnel

Strong contrast would result from the construction and operation of the proposed Project in a panoramic landscape setting with designated VRM Class IV land (on the west of the road) viewed from land without visual resource management designation. The proposed Project would cross relatively level to rolling terrain and would be partially backdropped for travel route viewers along SR 408 with a level view. Disturbance associated with construction access would not be visible from the KOP. The proposed structures would be seen at approximately 0.3 mile and would introduce strong contrast for structure elements of form, line, and color, with moderate contrast introduced for texture into the landscape. Unobstructed views of the Project within close proximity would result in an overall strong degree of contrast from this KOP. Selective mitigation measure #10 (maximize span at crossing) would reduce contrast.

View north from State Route 408, north of Socorro, New Mexico.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO18 Socorro	Township: 2S	
VRM Class: IV (viewed from Socorro)	Range: 1W Section: 25	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat MG: Geometric plateau	FG: Tall individual, numerous, pyramidal and spherical, low patch/strip MG: Low individual, stippled, spherical	FG/MG: numerous individual, tall narrow rectangular (buildings)
Line	FG: Curving band (road) MG: Horizontal, diagonal	FG: Butt edge (at road) MG: Weak diffuse	FG/MG: Vertical, horizontal, diagonal
Color	FG/MG: Light browns, grey	FG/MG: Light to dark green, sage, golden, brown	FG/MG: Brown, light yellow and salmon, white, deep red
Texture	FG/MG: Fine grain	FG/MG: Medium grain and density	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall thin vertical, triangular, transparent
Line	NA	NA	FG: Repeating vertical, complex, geometric, angular/horizontal
Color	NA	NA	FG: Brown, dull, gray
Texture	NA	NA	FG: Fine grain, matted, uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
Yes

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from construction and operation of the proposed Project within a modified focal landscape setting with BLM VRM Class IV designated land. The proposed Project would cross foothills in rolling terrain which would be partially skylined for residences with interior views. Construction access disturbance to landform and vegetation would not be visible from the KOP because of the inferior viewing condition and the presence of vegetative screening. The proposed structures would be seen at approximately 0.8 mile and viewed in context with existing distribution lines. The Project would result in moderate structure contrast for form and line into the landscape and weak contrast for color and texture. The viewing distance and skylined condition, in consideration of the presence of existing distribution poles, would result in an overall weak-moderate degree of contrast from this KOP.

View to the north from SR 408 north of Socorro, New Mexico.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location**	Location Sketch
SunZia Southwest Transmission Project **Key Observation Point:** SO19 The Box SRMA **VRM Class: III and IV** (viewed from Class II)	Township: 3S Range: 1W Section: 31	

Characteristic Landscape Description

	Landform/Water	**Vegetation**	**Structures**
Form	FG: Rolling MG: Geometric, pyramidal	FG/MG: Amorphous patches, stippled	NA
Line	FG: Horizontal, diagonal MG: Irregular, strong horizontal line	FG: Diffuse edges, horizontal diagonal MG: Diffuse and digitate edges	NA
Color	FG: Browns, reddish brown MG: Dark/reddish browns, tans	FG/MG: Greens, tans and browns	NA
Texture	FG: Fine grain MG: Fine to medium grain	FG/MG: Fine to medium grain, medium density	NA

Proposed Activity Description (Facility)

	Landform/Water	**Vegetation**	**Structures**
Form	NA	NA	MG: Thin vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
Yes

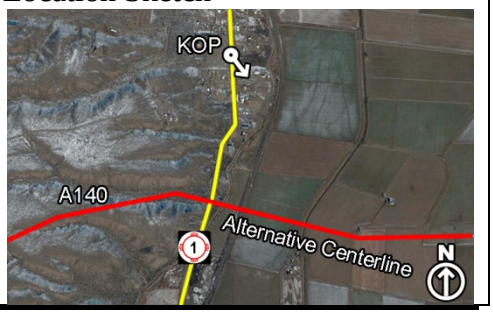
Additional mitigating measures recommended?
No

Evaluators Names:
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project in a feature landscape setting associated with The Box SRMA (VRM Class II) and views towards land with VRM Class III and IV designations. The proposed Project would cross rolling terrain and would be backdropped by adjacent terrain for recreation viewers with slightly superior viewing conditions. Disturbance to landform and vegetation associated with construction access would not be visible from the KOP due to screening by topography and vegetation. The proposed structures would be seen at approximately 2.5 miles and introduce moderate contrast into the landscape to structure elements of form and line with weak contrast introduced for color and texture. The viewing distance with the Project occurring in a backdrop condition would result in a weak-moderate degree of contrast.

View west from The Box SRMA towards the Magdalena Mountains.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO20 San Antonio (west) Residence	Township: 4S Range: 1E Section: 20	
VRM Class: II (viewed from land without VRM Classification)		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Sloped to gently rolling, flat BG: Horizontal geometric	FG: Clumped groupings to homogeneous patches BG: Weak geometric patch	FG: Thin, vertical, geometric
Line	FG: Horizontal BG: Horizontal, weak diagonal	FG: Horizontal butt edge BG: Weak horizontal	FG: Vertical, horizontal, diagonal
Color	FG: Tan, browns BG: Dulled blue-tan	FG: Light and dark greens, tans, browns BG: dulled blue-green	FG: white, reddish tan, browns
Texture	FG/BG: Fine grain	FG: Coarse to medium grain, medium density BG: Fine grain	FG: Fine grain, smooth

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Gently rolling	FG: Homogeneous patch	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Weak diagonal	FG: Weak butt edge	FG: Complex, angular; concave, horizontal
Color	FG: Browns	FG: Light and dark greens, tans, browns	FG: Dull gray
Texture	FG: Fine grain	FG: Medium grain	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x			x		x			
	Line			x				x		x			
	Color			x					x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
No

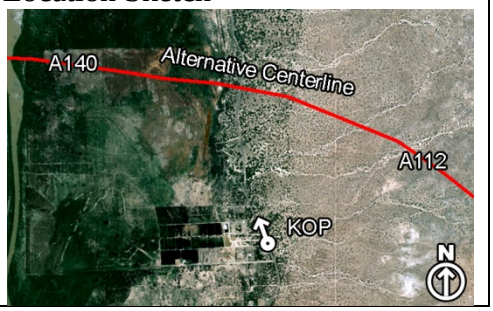
Additional mitigating measures recommended?
No – See Simulation 9

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project within a modified landscape setting with VRM Class II designated land, as viewed from residences north of San Antonio, New Mexico. The proposed Project would cross flat to rolling terrain and would be partially skylined. Construction access disturbance would introduce weak contrast to landform elements of line and color. Similarly, weak contrast would be introduced to vegetation elements of form and line. The proposed structures would be seen at approximately 0.5 mile and viewed in context, with existing vertical structures (distribution lines) and other cultural modifications. The proposed structures would introduce a strong structure contrast to form and line, with moderate contrast introduced for color and texture.

View to the southeast from residence along SR 1/Old US Highway 85 north of San Antonio, New Mexico.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO21 San Antonio (east)	Township: 4S	
VRM Class: II	Range: 1E Section: 27	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Relatively flat BG: Pyramidal	FG: Few tall roughly spherical and grouped strip/patch BG: Weak geometric patch	FG: Low repeating vertical with diagonal; few tall vertical with diagonal; low rectangular
Line	FG: Straight band (road), horizontal BG: Diagonal	FG: Butt edge (at road) BG: Weak butt edge	FG: Vertical, diagonal, horizontal
Color	FG: Grey, light brown BG: Dulled light brows and reddish-browns	FG: Light to dark greens, sage gold, gray, light to dark browns BG: Dulled bluish-tan and green	FG: Rusted red and salmon, browns, grey, green, white, white with a hint of salmon
Texture	FG: Fine grain BG: Medium to fine grain	FG: Medium grain, dense BG: Fine grain	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall thin vertical, triangular, transparent
Line	NA	NA	FG: Repeating vertical, complex, geometric, angular/horizontal
Color	NA	NA	FG: Brown, dull, gray
Texture	NA	NA	FG: Fine grain, matted, uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
Yes

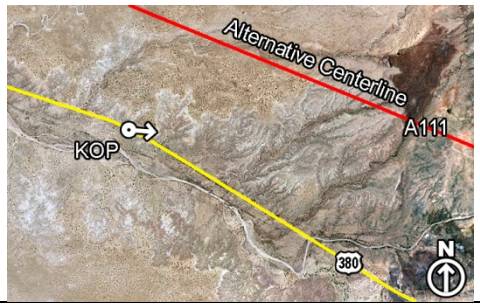
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project in a focal landscape setting with VRM Class II designation and associated with residences, northeast of San Antonio, New Mexico. The proposed Project would cross flat terrain and would be partially screened for residences with level views. Dense vegetation lining the road provides screening for construction access disturbance to landform and vegetation. Portions of the proposed structures would be seen as the Project crosses the road at approximately 0.75 mile and would introduce moderate contrast of form and line into the landscape, with weak contrast for color and texture.

View to the north from residences along Bosquecito Road near San Antonio, New Mexico.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location**	Location Sketch
SunZia Southwest Transmission Project	Township: 5S	
Key Observation Point: SO22 US Route 380	Range: 2E	
VRM Class: II	Section: 6	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Relatively flat to low-rolling and geometric masses	FG/MG: Strip, stippled, horizontal patch	FG/MG: Low, diagonal, repeating vertical, even ordered (guardrail)
Line	FG/MG: Horizontal, straight band, diagonal	FG/MG: Butt edge, diffuse edges	FG/MG: Diagonal, vertical
Color	FG/MG: Tans, browns/reddish brown	FG/MG: Olive green, greens, tans and browns	FG/MG: Dulled gray
Texture	FG/MG: Fine grain, smooth	FG/MG: Medium to fine grain	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG/MG: Tall vertical, geometric, triangular, transparent
Line	NA	NA	FG/MG: Complex angular; concave horizontal
Color	NA	NA	FG/MG: Dull gray
Texture	NA	NA	FG/MG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x		x		
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
No

Additional mitigating measures recommended?
No – See Simulation 10

Evaluators Names:
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project within a panoramic landscape setting associated with US Route 380 and the San Pedro ACEC. The proposed Project would cross rolling terrain and would be primarily screened by topography. Construction access disturbance to landform and vegetation would not be visible from the KOP. A small portion of the Project would be seen at approximately 1.6 miles in a partial skyline condition and introduce strong contrast into the landscape for structure elements of form with moderate contrast introduced for line, color, and texture.

View to the east from US Route 380, east of San Antonio, New Mexico.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO23 Bosque NWR	Township: 8S Range: 3W Section: 15	
VRM Class: NA		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Flat to gently rolling	FG/MG: Few, tall, spherical, pyramidal to narrow, conical, strip/patch	FG/MG: Repeating, narrow, vertical, rectangular, and triangular
Line	FG: Straight bands (road and canal), horizontal MG: Weak, undulating horizontal	FG: Butt edge (at road) MG: Weak, digitate edges	FG/MG: Vertical, horizontal, diagonal
Color	FG/MG: Light browns; gray, white, yellow (road)	FG/MG: Light to dark green, golden, grays, light to dark brown	FG/MG: Light brown, tan, white, gray, greens
Texture	FG/MG: Fine grain	FG: Uneven, medium grain, low density MG: Fine grain	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Weak, thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderat	Weak	None	Strong	Moderat	Weak	None	Strong	Moderat	Weak	None
Elements	Form				x			x				x	
	Line				x			x				x	
	Color				x			x				x	
	Texture				x			x				x	

Does project design meet visual resource management objectives?
NA

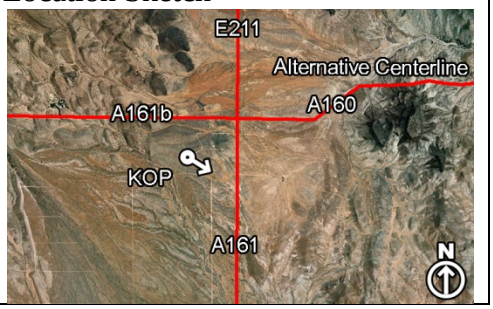
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a highly modified landscape setting associated with views from the Bosque National Wildlife Refuge along Old US Highway 85. The proposed Project would cross relatively flat to gently rolling terrain in a backdropped condition. Disturbance to landform and vegetation elements of form, line, color, and texture would not be visible from the KOP. The Project may be visible at approximately 4.5 miles within the valley through breaks in the vegetative screening and, if visible, weak contrast would be introduced into the landscape for structure elements of form, line, color, and texture. The viewing distance with the Project occurring in a modified landscape with a backdropped condition would result in a weak degree of contrast from this KOP.

View to the north from Old US Highway 85 just beyond the Bosque National Wildlife Refuge.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:** Coordinates	Location Sketch
SunZia Southwest Transmission Project **Key Observation Point:** SO24 Willow Springs and Whispering Mountain Ranches **VRM Class: IV** (KOP on private land viewing Class IV to the northeast)	Latitude: 33° 52'54.83" N Longitude: 107° 2'25.13" W	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Smooth, rolling MG: Complex, numerous, flat-top pyramidal or mesa	FG/MG: Sparse, low, irregular; spherical, individual and few patches and strips	FG/MG: Repeating, vertical, narrow, cylindrical with horizontal and diagonal members, rectangular and pyramidal
Line	FG: Weak, broken, undulating MG: Complex, irregular, horizontal	FG: Not discernible MG: Weak, broken; irregular, diffuse	FG/MG: Vertical, diagonal, horizontal
Color	FG/MG: Light to medium brown, light to medium reddish brown	FG/MG: Golden, gray, dark green	FG/MG: Brown, gray, white, rust red
Texture	FG/MG: Fine grain	Fine grain, sparse, low density	Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Smooth, rolling	FG: Carpeted, low, to sparse, irregular, amorphous	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Weak, broken, undulating, horizontal	FG: Weak, butt edge (at road)	FG: Complex, angular; concave, horizontal
Color	FG: Light to medium brown, light to medium reddish brown	FG: Golden, gray, dark green	FG: Dull gray
Texture	FG: Fine grain	FG: Fine grain, low density, sparse	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line			x					x		x		
	Color			x					x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
Yes

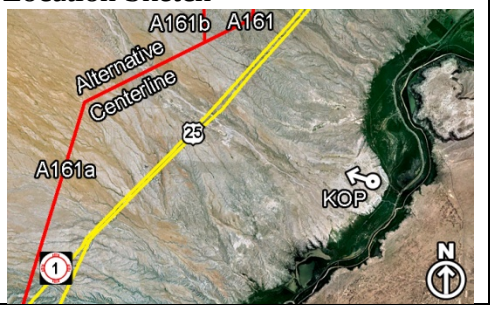
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a feature landscape setting with VRM Class IV designated land and associated with the future Willow Springs development. The proposed Project would cross rolling terrain and would be backdropped by adjacent terrain for residences with views. Construction access disturbance to the landform would be visible from the KOP and introduce weak contrast to line and color. The existing vegetation is sparse and does not offer screening of the Project; however, construction access disturbance to vegetation may be partially visible. The proposed structures would be seen at approximately 0.5 mile and viewed in context with existing transmission line structures visible at approximately 0.6 mile. The proposed structures would be larger than the existing structures and would introduce strong contrast to form and line, with moderate contrast introduced for color and texture. The viewing distance of the proposed Project from the KOP, in consideration of the Project occurring in a backdropped condition with the presence of existing structures, would result in a moderate-strong degree of contrast. Selective mitigation measure #7 would reduce contrast where landform would provide a backdrop condition.

View to the northeast from an unpaved road within the Willow Springs development.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: T03S	
Key Observation Point: SO27 Fort Craig National Historic Site	Range: R01W	
VRM Class: IV (viewed from Class I)	Section: 31	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Relatively flat, gently rolling BG: Elongated, geometric mass	FG/MG: Low patches	FG: Vertical, rectangular (ruin)
Line	FG/MG: Horizontal BG: Undulating, broken horizontal	FG/MG: Transitional edge	FG: Vertical, horizontal
Color	FG/MG: Light tan, gray BG: Dulled blue-green	FG/MG: Golden, browns, greens	FG: Tans, light browns
Texture	FG/MG: Medium to fine grain BG: Fine grain, silhouette	FG/MG: Medium to fine grain	FG: Coarse (wall) and fine grain (ruin)

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Weak, thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
Yes

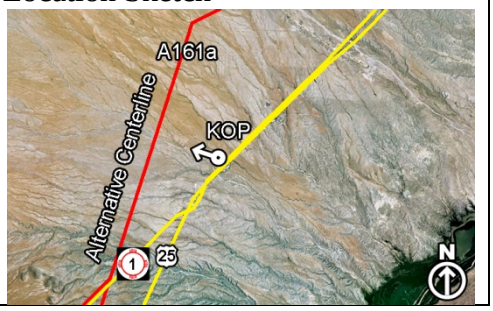
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project within a panoramic landscape setting with VRM Class IV designation and viewed from the Fort Craig National Historic Site. The proposed Project would cross flat terrain in a backdropped condition from a slightly inferior view. Construction access disturbance to landform and vegetation would not be visible from the KOP. The proposed structures might be visible at approximately 5.5 miles and would likely blend into the landscape setting. However, the structures would have the potential to introduce weak contrast to structure elements of form, line, color, and texture. The viewing distance with the Project in a backdropped condition could result in a weak degree of contrast introduced from the KOP.

View to the northwest from the Fort Craig National Historic Site.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO28 Rest Area – Fort Craig/I-25	Township: 8S	
VRM Class: IV	Range: 3W	
	Section: 15	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Flat to gently rolling BG: Jagged, mountain silhouettes	FG/MG: Homogeneous, expansive patch	FG: Short, thin, vertical (fence)
Line	FG/MG: Horizontal BG: Irregular, layered horizontal	FG/MG: Butt edge (at asphalt), weak diffuse edge	FG: Low vertical
Color	FG/MG: Reddish brown, gray BG: Dulled bluish-tan	FG/MG: Olive green, greens, tans, and browns	FG: Brown
Texture	FG/MG: Fine grain BG: Fine to medium grain	FG/MG: Medium grain and density	FG: Fine grain, even, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
Yes

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project within a panoramic landscape setting with VRM Class IV designation and associated with views from a rest area on I-25 near Fort Craig. The proposed Project would cross flat terrain in a partially backdropped condition from a level view. Massed low vegetation would offer screening for construction access disturbance to landform and vegetation. The proposed structures would be seen at approximately 1.5 miles and would introduce moderate contrast for structure elements of form and line, with weak contrast introduced for color and texture.

View to the northwest from a rest area on I-25 near Fort Craig.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO30 SR 1 (El Camino Real)	Township: 9S	
VRM Class: NA	Range: 4W	
	Section: 13	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Geometric, plateaus MG: Rugged, geometric	FG: Stippled, geometric patch, low homogeneous expansive (grasses) MG: Expansive homogeneous	FG: Geometric (bridges, signs); transparent
Line	FG: Diagonals, horizontal, curving band MG: Irregular horizontal	FG: Butt edges, diffuse edge MG: Not	FG: Vertical, horizontal, diagonal
Color	FG: Tans and browns MG: Dulled bluish-browns (outcrops)	FG: Olives, tans, and browns MG: Dulled bluish-tan	FG: Gray
Texture	FG: Medium to fine grain MG: Medium grain	FG: Fine to medium grain MG: Fine grain	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, geometric, transparent
Line	NA	NA	FG: Thin, triangular, long, horizontal, convex
Color	NA	NA	FG: Gray, light gray
Texture	NA	NA	FG: Coarse to medium, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

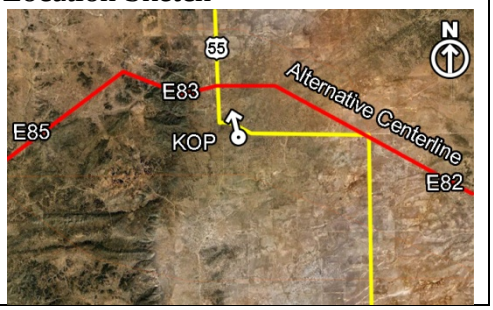
Additional mitigating measures recommended?
Yes – See Simulation 11

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project in a focal/enclosed landscape setting associated with New Mexico SR 1 (El Camino Real National Byway). The proposed Project would cross relatively flat to steep terrain and would be partially skylined and backdropped. Existing disturbance similar to that required for construction access is not visible from the KOP; thus any disturbance to landform and vegetation associated with construction access for the proposed Project will not be visible. The proposed Project would be seen at approximately 0.9 mile and introduce strong contrast into the landscape for structure elements of form and line, with moderate contrast introduced for color and texture. The viewing distance with a portion of the Project in a skylined condition would result in a moderate-strong degree of contrast from the KOP.

View to the southeast from New Mexico State Route 1 (El Camino Real National Byway).

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: SO31a Gran Quivira unit of Salinas Pueblo Missions National Monument (Link E83)	Township: 1S Range: 8E	
VRM Class: NA	Section: 3	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Low, rolling hills, flat	FG/MG: Amorphous patches, stippled	FG: Low, rectangular, geometric (ruins, residences)
Line	FG/MG: Horizontal and simple angles	FG/MG: Digitate to diffuse edges, weak diagonal but edge (pipeline)	FG: Horizontal, vertical, diagonal
Color	FG/MG: Tans and browns	FG/MG: Dark greens and browns	FG: Browns, tans, reddish brown, white
Texture	FG/MG: Fine grain	FG/MG: Fine to medium grain	FG: Medium to fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x			x			x		
	Line				x			x			x		
	Color				x			x				x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

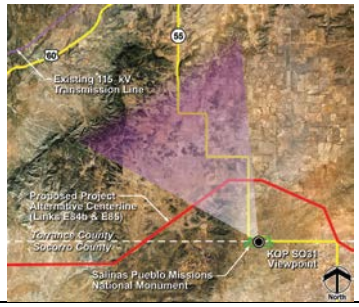
Additional mitigating measures recommended?
No – See Simulation 47a

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project within a panoramic landscape, viewed from the Gran Quivira unit of Salinas Pueblo Missions National Monument. The Project would cross flat to slightly rolling terrain which would be backdropped by adjacent terrain and partially skylined. Construction access disturbance to landform and vegetation would be visible from the KOP although contrast would be weak. The proposed structures would be seen at approximately 2.0 miles and would introduce moderate contrast to structure elements of form and line with weak contrast for color and texture. The viewing distance of the proposed Project from the KOP, in consideration of the Project occurring in a partial skyline condition, would result in an overall moderate-weak degree of contrast.

View to the north from the Gran Quivira unit of Salinas Pueblo Missions National Monument.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 1S	
Key Observation Point: SO31b Gran Quivira unit of Salinas Pueblo Missions National Monument (Link E84)	Range: 8E	
VRM Class: NA	Section: 3	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Low, rolling hills, flat	FG/MG: Amorphous patches, stippled	FG: Low, rectangular, geometric (ruins, residences)
Line	FG/MG: Horizontal and simple angles	FG/MG: Digitate to diffuse edges, weak diagonal but edge (pipeline)	FG: Horizontal, vertical, diagonal
Color	FG/MG: Tans and browns	FG/MG: Dark greens and browns	FG: Browns, tans, reddish brown, white
Texture	FG/MG: Fine grain	FG/MG: Fine to medium grain	FG: Medium to fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Weak, thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project within a panoramic landscape, viewed from the Gran Quivira unit of Salinas Pueblo Missions National Monument. The Project would cross flat to slightly rolling terrain in screened and skyline conditions from a superior view. Construction access disturbance to landform and vegetation would not be visible from the KOP. The proposed structures would be seen at approximately 4.3 miles and would introduce moderate contrast for the structure element of line with weak contrast for form, color, and texture. The viewing distance of the proposed Project from the KOP, in consideration of the Project occurring in a partial skyline condition, would result in an overall weak degree of contrast.

View to the north from the Gran Quivira unit of Salinas Pueblo Missions National Monument.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project** **Key Observation Point:** TU1 Mammoth Residences **VRM Class: NA**	**Location:** Township: 8S Range: 17E Section: 18	Location Sketch 

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat to undulating rolling hills BG: Irregular, rugged	FG: Individual, rounded and horizontal strip/patch, stippled	FG: Thin, vertical
Line	FG: Horizontal to sloping, concave, diagonal, horizontal BG: Irregular, horizontal bands	FG: Horizontal, butt edge (at road and wash), diffuse edge	FG: Vertical
Color	FG: Browns, gray BG: Dulled, bluish-green and reddish-brown	FG: Greens, grays, tans	FG: Dull brown and gray
Texture	FG: Fine grain BG: Medium to fine grain	FG: Medium to fine grain, medium density	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Undulating to rolling hills	FG: Individual, rounded and horizontal strip/patch, stippled	FG: Thin, vertical
Line	FG: Weak, horizontal	FG: Horizontal, butt edge (at road and wash), diffuse edge	FG: Vertical
Color	FG: Brown	FG: Greens, grays, tans	FG: Dull gray
Texture	FG: Fine grain	FG: Medium to fine grain, medium density	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x			x		
	Line		x				x				x		
	Color			x					x			x	
	Texture			x					x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Moderate contrast would result from construction and operation of the proposed Project within a modified landscape setting near residences along the northern portion of Mammoth. The proposed Project would cross rolling terrain and would primarily be backdropped for residential viewers with level views. Disturbance to the landform associated with construction access would be visible from the KOP while crossing rolling terrain. The Project would introduce moderate contrast to landform elements of line, with weak contrast for form, color, and texture. Similarly, moderate contrast would be introduced for the vegetative element of line, with weak contrast introduced for form. The proposed structures would be seen at approximately 1.1 miles and would be screened by vegetation for residences with foreground views of the Project. Additionally, the Project would be seen in the presence of an existing transmission line which would be perpendicular to the proposed Project. The proposed structures would be larger than the existing structures and would introduce moderate contrast to form and line, with weak contrast introduced for color and texture.

Residential view to the north from Riverside Drive in Mammoth, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 8S	
Key Observation Point: TU2 SR 77	Range: 17E	
VRM Class: NA	Section: 18	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	Flat to moderately rolling	Amorphous patches; numerous, low, spherical, tall columnar	Regular, decreasing vertical to few, geometric; numerous vertical on horizon
Line	Bold, curving band (road); simple, undulating horizontal	Butt edge (at road); weak, irregular, transitional edge	Vertical with connecting horizontal and diagonal
Color	Light to dark gray, white, yellow (road); light brown, reddish brown	Light sage, light tan, green, reddish brown, brown	Reddish brown, light brown, gray, yellow, blue, green
Texture	Fine grain	Uneven, coarse to medium grain, medium density	Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	Rolling	Numerous, low, spherical; tall columnar	Tall, vertical, geometric, triangular, transparent
Line	Simple, broken, undulating, horizontal	Weak, irregular transitional edge	Complex, angular; concave, horizontal
Color	Light to dark gray, white, yellow (road); light brown, reddish brown	Light sage, light tan, green, reddish brown and brown	Dull gray
Texture	Fine grain	Uneven, medium grain and density	Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line			x				x			x		
	Color			x					x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

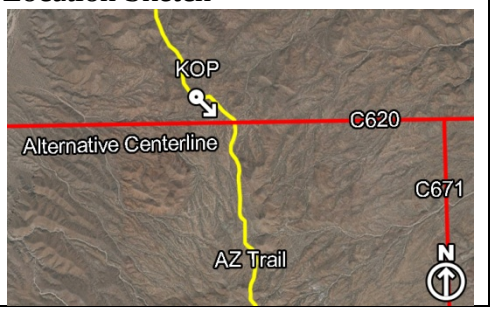
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Moderate contrast would result from construction and operation of the proposed Project within a modified landscape setting along SR 77. The Project would cross rolling terrain and be partially skylined. Disturbance to landform and vegetation associated with construction access would be visible from the KOP and would introduce weak contrast to landform elements of line and color. The proposed structures would cross SR 77 and would be viewed in context with existing transmission lines/structures on both sides of the. The proposed structures would be larger than the existing transmission lines and would introduce moderate contrast to form and line, with weak contrast introduced for color and texture. The Project viewed in context of existing transmission lines where construction access would be visible would result in an overall moderate degree of contrast from this KOP. Selective mitigation measures and #10 (maximize span at crossing) would reduce contrast in this area.

View to the north from SR 77 (Copper Corridor Scenic Road East).

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 7S	
Key Observation Point:	Range: 15E	
TU3 Arizona National Scenic Trail (Black Hills)	Section: 36	
VRM Class: NA		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Low, rolling to high, rolling or mounded BG: Irregular, horizontal	FG: Amorphous patches, numerous, individual spherical, V-shaped, clumped, columnar	NA
Line	FG: Multiple broken, weak, undulating horizontal; bold, undulating, horizontal BG: Rugged, horizontal	FG: Multiple, weak transitional edge	NA
Color	FG/BG: Light brown, reddish brown	FG: Light green, green, gray, dark brown	NA
Texture	FG: Medium to fine grain, smooth BG: Medium grain	FG: Coarse to medium grain, medium density	NA

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Low, rolling	FG: Amorphous patches, numerous, individual spherical, "v" shaped, clumped, columnar	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Multiple, broken, weak undulating horizontal	FG: Multiple, weak transitional edge	FG: Complex, angular: concave, horizontal
Color	FG: Light brown, reddish brown	FG: Light green, green, gray, dark brown	FG: Dull gray
Texture	FG: Smooth, fine grain	FG: Coarse to medium grain, medium density	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x		x			
	Line		x					x		x			
	Color		x						x	x			
	Texture			x					x	x			

Does project design meet visual resource management objectives?
NA

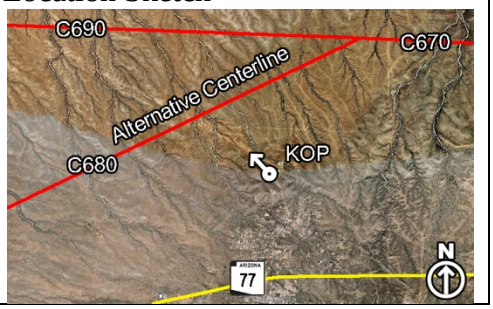
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Strong contrast would result from construction and operation of the proposed Project within an enclosed landscape setting with minimal cultural modifications. The proposed Project would cross rolling terrain and would be partially backdropped for Arizona National Scenic Trail viewers with a superior view. Disturbance to the landform (associated with construction access and tower pad clearing) would be visible from the KOP and would introduce moderate contrast to landform elements of line and color, with weak contrast introduced for form and texture. Disturbance to vegetation would introduce weak contrast to the vegetation elements of form and line. The proposed structures would be seen at approximately 0.2 mile in a partially backdropped condition although the project would introduce strong structure contrast for form, line, color, and texture. The overall project contrast that would be viewed in close proximity in an intact landscape setting would result in a strong level of contrast from this KOP. Selective mitigation measures # 7 (self supporting lattice structures) and #10 (maximize span at crossing) would reduce contrast in this area.

View to the southeast from the Arizona National Scenic Trail.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 9S	
Key Observation Point: TU4 Oracle Residences	Range: 15E	
VRM Class: NA	Section: 22	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Gently to moderately rolling to irregular, rugged	FG/MG: Clumped, low to stippled to patch	FG: Thin, vertical (transmission towers), sweeping (conductors)
Line	FG/MG: Horizontal, slightly undulating to jagged and angular	FG/MG: Diffuse edge and weak butt edge (pipe line)	FG: Vertical, diagonal, curving (conductors)
Color	FG /MG: Reddish browns	FG/MG: Greens, golden	MG: Dull gray
Texture	FG/MG: Fine to medium grain	FG/MG: Medium to fine grain	MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG/MG: Gently to moderately rolling	FG/MG: Clumped low to stippled to patch	FG: Thin, vertical
Line	FG/MG: Horizontal, slightly undulating	FG/MG: Weak butt edge	FG: Vertical
Color	FG /MG: Reddish browns	FG/MG: Greens, golden	FG: Dull gray
Texture	FG/MG: Fine to medium grain	FG/MG: Medium to fine grain	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x			x		
	Line		x				x				x		
	Color			x					x			x	
	Texture			x					x			x	

Does project design meet visual resource management objectives?
NA

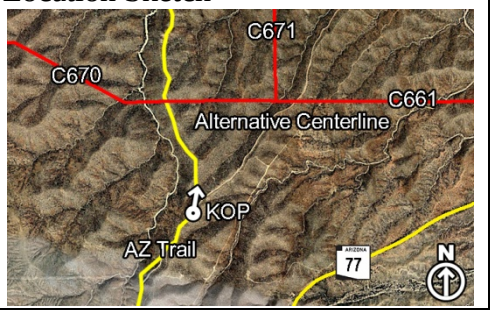
Additional mitigating measures recommended?
No – See Simulation 36

Evaluator Name(s):
EPG Visual Personnel

Moderate contrast would result from construction and operation of the proposed Project within a modified landscape setting associated with residences near Oracle, Arizona. The proposed Project would cross rolling terrain and would be backdropped by terrain. Disturbance to the landform and vegetation associated with construction access would be visible from the KOP, which is associated with superior views, and would introduce moderate contrast to the landform element of line, with weak contrast introduced for form, color, and texture. The proposed structures would be seen at approximately 1.0 mile and would parallel an existing transmission line (approx. 0.95 mile). In addition, a pipeline corridor would be perpendicular to the proposed Project. The proposed structures would be larger than the existing transmission line and would introduce moderate contrast to form and line, with weak contrast introduced for color and texture.

View to the northwest from residences along Rockliffe Boulevard in Oracle, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project** **Key Observation Point:** TU5 Arizona National Scenic Trail (Tiger Mine Trailhead) **VRM Class: NA**	**Location:** Township: 9S Range: 16E Section: 17	Location Sketch 

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Rolling terrain, pyramidal BG: Rough, rugged	FG/MG: Low stippled, grouped/clumped BG: Indistinct	NA
Line	FG/MG: Undulating, angular/diagonal BG: Irregular horizontal	FG /MG: Diffuse BG: Indistinct	NA
Color	FG/MG: Brown, reddish-brown BG: Dulled bluish-brown	FG/MG: Variations of green, grays, brownish red BG: Indistinct	NA
Texture	FG/MG: Fine to medium grain BG: Medium grain	FG/MG: Medium grain BG: Fine grain	NA

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, geometric, transparent
Line	NA	NA	FG: Thin, triangular, horizontal, convex
Color	NA	NA	FG: Dark gray, light gray
Texture	NA	NA	FG: Coarse, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x		x			
	Line		x				x			x			
	Color			x					x		x		
	Texture			x					x		x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
Yes – See Simulation 37a and 37b

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a panoramic landscape setting with few cultural modifications. The proposed Project would cross rolling terrain and would be partially backdropped by adjacent terrain. Some disturbance to the landform and vegetation (associated with construction access and tower pad clearing) would be visible from the KOP and introduce moderate contrast to landform elements of line, with weak contrast introduced for form, color, and texture. The proposed structures would be seen at approximately 0.7 mile and introduce strong structure contrast into the landscape for form and line, with moderate contrast for color and texture. Selective mitigation measures #7 (self supporting lattice structures) and #10 (maximize span at crossing) would reduce contrast in this setting.

View to the north from the Arizona National Scenic Trail, Tiger Mine Trailhead, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 09S	
Key Observation Point: TU6 San Manuel	Range: 17E	
VRM Class: NA	Section: 10	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Relatively flat to low-rolling to trapezoidal (tailings)	FG: Diagonal rows, patches/strip, stippled	FG: Geometric (building), thin vertical
Line	FG: Horizontal, diagonal	FG: Diagonal, horizontal, diffuse	FG: Vertical, horizontal
Color	FG: Reddish brown, tans	FG: Tans, olive green, greens, browns	FG: Gray, white
Texture	FG: Fine to medium grain, smooth	FG: Fine to medium grain	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall thin vertical, triangular, transparent
Line	NA	NA	FG: Repeating vertical, complex, geometric, angular/horizontal
Color	NA	NA	FG: Brown, dull, gray
Texture	NA	NA	FG: Fine grain, matted, uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

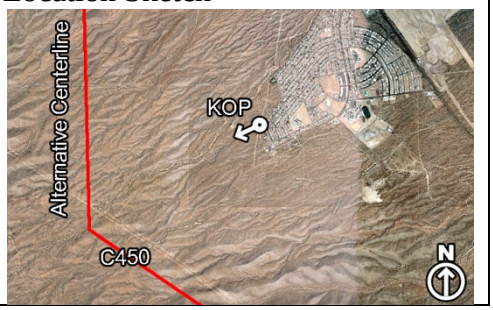
Additional mitigating measures recommended?
No – See Simulation 38

Evaluator Name(s):
EPG Visual Personnel

Moderate contrast would result from construction and operation of the proposed Project within a highly modified landscape setting associated with dispersed residential northeast of San Manuel (San Pedro River Valley). The proposed Project would cross rolling terrain and would be backdropped by the existing mine for residences with inferior views. Existing disturbance is not visible from the KOP; therefore disturbance associated with the Project would not be visible from the KOP. The proposed structures will be seen at approximately 1.0 mile and viewed in context of the existing mine landform disturbance. Color contrast is anticipated to be stronger and the structures will not blend in to the landscape as well as typical backdropped conditions with the presence of vegetation. The proposed structures would introduce moderate contrast for structure elements of form, line, color, and texture into the landscape.

View to the southwest from residence near San Manuel, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU7 San Manuel (west)	Township: 10S	
VRM Class: NA	Range: 16E	
	Section: 6	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Low, rolling BG: Irregular, rugged	FG: Clumped and "V"-shaped, individual to patch BG: Low, homogeneous	FG: Low, wide, cylindrical (screened water tank)
Line	FG: Diagonal, undulating horizontal BG: Irregular, broken horizontal	FG: Diffuse edge BG: Weak, digitate edge	FG: Vertical, horizontal
Color	FG: Reddish brown, light brown BG: Brown	FG: Olive green, green, golden BG: Dark bluish-green	FG: Tan, brown, white, yellow, red
Texture	FG: Fine grain BG: Medium grain	FG: Coarse to medium grain BG: Fine grain	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

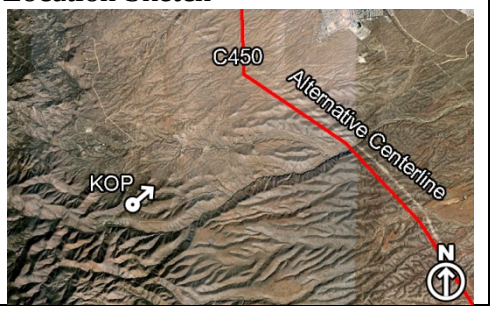
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a feature landscape setting which is primarily modified by development in San Manuel. The proposed Project would cross relatively flat terrain and would be screened by vegetation and backdropped by adjacent terrain. The landform and vegetation in the immediate foreground would provide screening for disturbance and potentially the proposed structures. If the proposed structures are partially visible in breaks in the landform and vegetation screening, they would be seen at a distance of approximately 1.5 miles which would reduce contrast and may be limited to the upper portion of the structures. The landform and vegetative screening, and background condition would result in an overall weak degree of contrast from this KOP.

View to the southwest from residences along Webb Drive in San Manuel, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU8 Mount Lemmon Road	Township: 10S Range: 16E Section: 21	
VRM Class: NA		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Rounded mass to relatively flat MG: Slight, diagonal plain BG: Rugged horizontal	FG: Clumped groups to indistinct large patches; few, individual, spherical MG: Large patches	FG: Low, scattered, rectangular
Line	FG: Bold, diagonal, horizontal MG: Simple horizontal BG: Irregular horizontal	FG: Weak, diffuse edges MG: Diagonal strips	FG: Weak, short, horizontal, vertical
Color	FG: Light reddish brown, light brown, brown MG/BG: Dulled light browns	FG: Light to dark green, light browns MG: Dulled blue-green	FG: White, red, gray,
Texture	FG/MG: Fine grain BG: Fine to medium grain	FG: Medium grain and density MG: Fine grain	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Weak, thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderat	Weak	None	Strong	Moderat	Weak	None	Strong	Moderat	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a panoramic landscape setting associated with Mount Lemmon Road. The proposed Project would cross relatively flat to gently rolling terrain associated with the San Pedro River Valley. Recreation viewers with superior views of the Project would be backdropped by adjacent terrain. Similar existing disturbance (from a pipeline that the proposed Project parallels) required for construction access would not be visible from this KOP; therefore any disturbance associated with construction would not be visible. The structures would be visible at approximately 3.5 miles and would blend into the landscape setting resulting in weak structure contrast for form, line, color, and texture.

View to the northeast from Mount Lemmon Road.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project** **Key Observation Point:** TU9 San Pedro River Valley (north) **VRM Class: NA**	**Location:** Township: 12S Range: 19E Section: 33	Location Sketch 

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat to gently rolling MG: Rolling, semi-rugged	FG: Individual, rounded, clumped; tall, columnar MG: Low, expansive patch	FG: Geometric, rectangular
Line	FG: Horizontal, straight MG: Gently undulating, horizontal; diagonal	FG: Spherical; straight, vertical MG: Weak transitional edge	FG: Straight, horizontal, vertical, and diagonal
Color	FG: Brown, reddish brown MG: Dark brown, reddish brown	FG: Greens, dark green, brown MG: Greens	FG: Dark red, tan, brown, dulled green
Texture	FG: Fine grain MG: Medium to coarse	FG: Uneven, coarse grain, medium density MG: Even, medium grain, medium density	FG: Fine to medium, even, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

The Project may not be visible for dispersed residences in the San Pedro River Valley with inferior views. The proposed Project would cross rolling terrain and would be primarily screened by foreground landform and vegetation. If visible, the proposed structures would occur approximately 2.5 miles from this KOP resulting in weak contrast to form, line, color, and texture. The landform screening and distance that the Project would occur from the KOP would result in an overall weak degree of contrast.

View southwest from residences along Cascabel Road in the San Pedro River Valley.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU10 Cascabel Road	Township: 15S	
VRM Class: NA	Range: 20E	
	Section: 21	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Gently to moderately rolling; bold band (road)	FG: Low, medium height, indistinct	FG: Thin, vertical
Line	FG: Horizontal, undulating, diagonal, angular	FG: Butt edge (at road), indistinct	FG: Vertical, horizontal
Color	FG: Brown, light tan, beige	FG: Variations of green	FG: Brown, light gray
Texture	FG: Fine to medium grain	FG: Medium grain and density	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall vertical, geometric, triangular transparent
Line	NA	NA	FG: Complex, angular; concave, horizontal
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

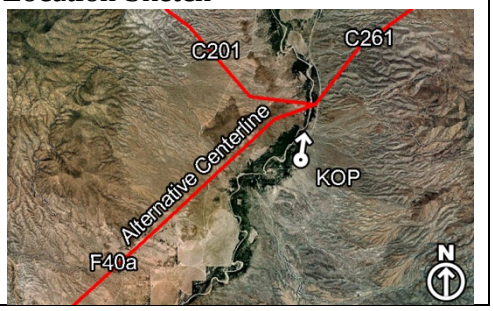
Additional mitigating measures recommended?
Yes - See Simulations 39

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project, within an enclosed landscape setting that is modified by dispersed residences in the San Pedro River Valley south of Cascabel. Within the valley, the proposed Project would cross low rolling terrain and would be partially screened by vegetation for travel route viewers on Cascabel Road with level views, Disturbance associated with construction access would be screened by landform and vegetation. The proposed structures would introduce strong contrast to structure form and line with moderate contrast introduced for color and texture while crossing Cascabel Road. The project would be skylined when crossing along the escarpment ridge resulting in moderate-strong contrast. Selective mitigation measures #10 (maximize span at crossing) would reduce contrast in this area.

View to the northwest from residences along Cascabel Road.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location**	Location Sketch
SunZia Southwest Transmission Project	Township: 15S	
Key Observation Point: TU11 Cascabel Road (south)	Range: 20E	
VRM Class: NA	Section: 15	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Mounded, gently rolling, geometric MG: Flat to low rolling BG: Irregular, horizontal	FG: Amorphous strip, numerous small, low, spherical	FG: Tall, vertical, diagonal, horizontal, geometric
Line	FG: Curving band, broken horizontal and diagonal MG: Horizontal BG: Irregular, horizontal	FG: Diffuse edge, transitional edge	FG: Complex, angular, horizontal, vertical
Color	FG: Light brown, tan, reddish brown; gray, yellow (road)	FG: Light to medium green, golden, light and dark brown	FG: Brown, dull gray
Texture	FG: Fine to medium grain MG/BG: Fine to medium grain	FG: Coarse to medium grain, uneven, medium to high density	FG: Fine grain, matted, uniform, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Rolling	FG: Numerous small, low spherical	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Broken horizontal and diagonal	FG: Diffuse edge, weak butt edge	FG: Complex, angular; concave, horizontal
Color	FG: Light brown/tan	FG: Light to medium green, gold, light, and dark brown	FG: Dull gray
Texture	FG: Fine grain	FG: Medium grain/medium density	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x			x		
	Line			x				x		x			
	Color			x					x			x	
	Texture			x					x			x	

Does project design meet visual resource management objectives?
NA

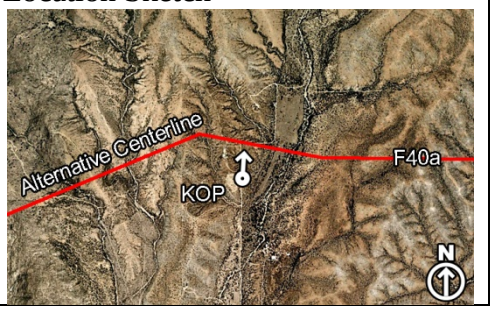
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a modified landscape setting associated with dispersed residences in the San Pedro River Valley. The proposed Project would cross foothills in rolling terrain and would be skylined for travel route viewers on Cascabel Road. Disturbance associated with construction access would be partially visible and would introduce weak contrast for the landform and vegetation elements of form, line, color, and texture. The proposed structures would be seen at approximately 0.2 mile and viewed in context with existing transmission lines (approximately 0.75 mile). The proposed structures would be larger than the existing transmission lines and would introduce strong contrast to structure elements of line, with moderate contrast to form, and weak contrast for color and texture. The viewing distance, skyline condition, and visible access, with consideration to existing structures visible, would result in an overall moderate-strong degree of contrast from this KOP. Selective mitigation measure #10 (maximize span at crossing) would reduce contrast at this crossing.

View to the north from residences along Cascabel Road north of Benson, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 16S	
Key Observation Point: TU12 Wrong Mountain Road Residence	Range: 18E	
VRM Class: NA	Section: 14	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Low, rolling, band (road) MG: Geometric, pyramidal mountain	FG: Homogeneous, low, growing, amorphous patches MG: Low, not distinct	FG: Geometric, blocky; tall, vertical, narrow
Line	FG: Layered, horizontal lines, diagonal, and straight; gently undulating MG: Jagged, horizontal	FG: Butt edge (at road); weak, diffuse edge MG: Weak, diffuse edge	FG: Straight, vertical, thin
Color	FG: Browns and tans MG: Dark brown and tans	FG: Greens, tans, browns MG: Dark green, tans, browns	FG: Dark gray
Texture	FG: Fine grain MG: Fine to medium grain	FG: Fine to medium, low density, sparse MG: Fine grain, stippled	FG: Smooth

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, triangular, transparent
Line	NA	NA	FG: Complex, angular; concave, horizontal
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Moderate contrast would result from construction and operation of the proposed Project within a modified feature landscape setting associated with dispersed residences along Wrong Mountain Road. The proposed Project would cross foothills in rolling terrain and would be backdropped by adjacent terrain. Existing access roads and disturbance is screened by topography, therefore construction access disturbance to landform and vegetation would not be visible from this KOP. The proposed structures would be seen at approximately 0.15 mile and would parallel existing transmission lines that are visible at approximately 0.3 mile. In addition, other smaller distribution lines are visible in the landscape. The proposed structures would be larger than the existing structures and would introduce moderate contrast to form, line, color, and texture. The viewing distance, in the presence of existing similar structures, would result in an overall moderate degree of contrast introduced at this KOP.

View to the north from residences along Wrong Mountain Road.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:** Township: 16S Range: 17E Section: 30	Location Sketch
Key Observation Point: TU13 Arizona Trail (Cienega Creek Preserve Trailhead)		
VRM Class: NA		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat to moderately rolling terrain MG: Bold rugged	FG: Homogeneous expansive patches, stippled MG: Geometric patches	FG: Geometric, thin vertical
Line	FG: Undulating horizontal MG: Convex horizontal, diagonal	FG: Weak butt edge (at trail), weak transitional and diffuse edges BG: Digitate edges	FG: Diagonal, vertical
Color	FG: Tans, reddish-brown MG: Tans, browns (outcrops)	FG: Green, olive, golden BG: Bluish-green	FG: Gray, brown, dull gray
Texture	FG: Fine grain BG: Medium grain	FG: Medium grain and dense BG: Fine grain	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall thin vertical, triangular, transparent
Line	NA	NA	FG: Repeating vertical, complex, geometric, angular/horizontal
Color	NA	NA	FG: Brown, dull, gray
Texture	NA	NA	FG: Fine grain, matted, uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x			x			x		
	Line				x			x			x		
	Color				x			x				x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

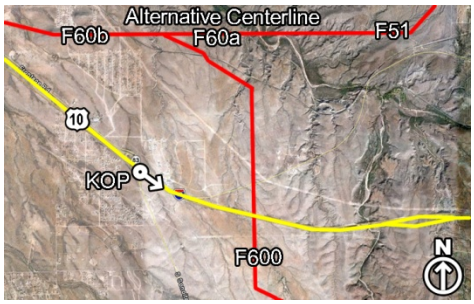
Additional mitigating measures recommended?
Yes – See Simulation 40a and 40b

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project within feature landscape setting with cultural modifications.. The proposed Project would cross rolling terrain and would be backdropped by adjacent terrain for viewers associated with the Cienaga Creek Preserve and the Arizona National Scenic Trail in a backdropped condition from an inferior view. Disturbance to landform and vegetation associated with construction access would be visible from this KOP with superior views of the Project. The proposed Project would be visible at approximately 1 mile, and would be viewed in context with 2 existing 345kV transmission lines visible at 1.4 miles. The proposed structures would introduce moderate contrast to structure elements of form and line, with weak contrast introduced for color and texture. Backdropped views of the Project viewed within the foreground with existing modifications would result in a weak-moderate level of contrast. Selective mitigation measures #5 and # 7 would reduce contrast in this area.

View to the northeast from the Cienega Creek Preserve Trailhead, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 16S	
Key Observation Point: TU14 SR 83	Range: 16E	
VRM Class: NA	Section: 26	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Low, rolling to flat MG: Low, irregular horizontal BG: Irregular horizontal	FG/MG: Low, amorphous patches and grouped, tall	FG/MG: Tall, vertical, transparent, complex, geometric (buildings)
Line	FG: Multiple curving bands, horizontal MG: Broken, irregular horizontal BG: Broken, irregular horizontal, silhouette	FG/MG: Straight to curving, butt edge (at roads), weak, transitional edge	FG/MG: Angular, diagonal, circular, horizontal, and vertical
Color	FG/MG: Brown, tan BG: Dulled blue-green	FG/MG: Variation of greens, golden	FG/MG: White, brown, dull gray
Texture	FG/MG/BG: Fine grain, smooth	FG/MG: Fine to medium grain, uneven, random	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

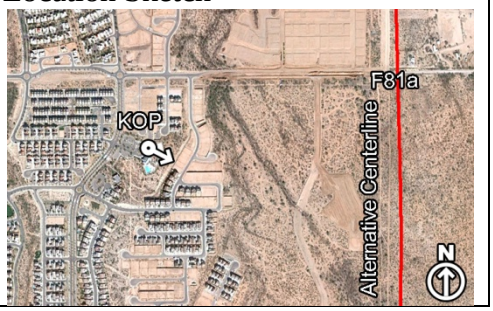
Additional mitigating measures recommended?
No – See Simulation 41

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project in a modified panoramic landscape setting associated with the South Sonoita Highway (Patagonia-Sonoita Scenic Road). The proposed Project would cross relatively flat to slightly rolling terrain in a partially backdropped condition. Dense vegetation would screen construction access and would not be visible from this KOP. The proposed Project would be seen at approximately 1.3 miles and viewed in context with existing transmission lines. The proposed structures would introduce moderate contrast for structure elements of line into the landscape and weak contrast for form, color, and texture. The presence of similar structures in consideration with partially backdropped conditions would result in an overall moderate-weak degree of contrast from this KOP.

View to the southeast from SR 83.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 15S	
Key Observation Point: TU15 Civano	Range: 15E	
VRM Class: NA	Section: 12	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Gently rolling to flat BG: Layered pyramidal	FG: Individual roughly spherical MG: Homogeneous patch	FG: Geometric/rectangular (buildings) MG: Tall thin vertical, transparent
Line	FG/MG: Horizontal BG: Irregular horizontal, diagonal	FG: Diagonal, vertical MG: Horizontal	FG: Vertical, horizontal, diagonals MG: Repeating vertical, horizontal
Color	FG/MG: Tans and browns BG: Bluish-tan and purple	FG/MG: Olive greens, browns, silver/green	FG: Tan, sienna, browns MG: Dull gray
Texture	FG/MG: Fine grain BG: Fine grain	FG/MG: Medium grain	FG: Fine to medium grain MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall thin vertical, triangular, transparent
Line	NA	NA	FG: Repeating vertical, complex, geometric, angular/horizontal
Color	NA	NA	FG: Brown, dull, gray
Texture	NA	NA	FG: Fine grain, matted, uniform

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Moderate contrast would result from the construction and operation of the proposed Project in a highly modified panoramic landscape setting associated with residences at Civano, Arizona. The Project would cross flat land and would be partially backdropped by distant terrain for residences with superior views. Due to existing development and vegetation, construction access disturbance would not be visible from this KOP. The structures will be visible at approximately 0.50 mile, behind existing similar structures visible at 0.50 mile. The proposed structures would be larger and introduce strong contrast for structure elements of form, with moderate contrast for line and weak contrast for color and texture introduced into the landscape. Superior views of the Project from residences while viewed in context with the developed area of Tucson would result in an overall moderate degree of contrast from this KOP.

View to the southeast from residences in Civano, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU16 Saguaro National Park (east)	Township: 14S	
VRM Class: NA	Range: 16E	
	Section: 32	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Gently to moderately rolling MG: Flat, level BG: Low, mountain silhouettes	FG: Individual, clumped; tall columnar in expansive patch MG: Low, homogeneous expansive patch	FG: Low, geometric MG: Transparent, vertical and low, multiple, cubic
Line	FG: Undulating horizontal MG: Straight horizontal BG: Irregular horizontal	FG: Vertical, diagonal, indistinct MG: Weak, transitional edge	FG: Straight, rectangular MG: Vertical, weak horizontal
Color	FG /MG: Brown and tans BG: Dulled bluish-tan	FG: Variations of greens, browns, golden MG: Green, dark green	FG: Tan, gray MG: Light gray, brown, white, light red
Texture	FG/MG/BG: Fine grain	FG: Coarse, rough, dense MG: Medium, uniform, stippled	FG: Fine grain, smooth MG: Fine to medium grain, even, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderat	Weak	None	Strong	Moderat	Weak	None	Strong	Moderat	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No – See Simulation 42

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a modified panoramic landscape setting with the Project occurring in the Rincon Valley, south of Tucson and viewed from Saguaro National Park (east). The Project would cross flat terrain and would be backdropped by terrain for Saguaro National Park viewers with superior views. Existing disturbance paralleling the proposed Project, similar to that required for construction access, is not visible from the KOP; thus disturbance to the landform and vegetation associated with construction access would not be visible. The structures would be visible at 2.0 miles due to minimal vegetative screening; however it would parallel an existing transmission line (approx. 2.1 miles). The proposed structures would be larger than the existing structures and would introduce weak contrast to structure elements of form, line, color, and texture to the landscape. The viewing distance of the proposed Project in a background condition with some vegetative screening would result in an overall weak degree of contrast for this KOP.

View west from a picnic area within the Saguaro National Park.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location**	Location Sketch
SunZia Southwest Transmission Project	Township: 15S	
Key Observation Point: TU17 Alvernon	Range: 14E	
VRM Class: NA	Section: 4	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Level MG: flat BG: Pyramidal and trapezoidal	FG : Clumped; Spherical MG to BG: Not distinguishable	FG: tall vertical triangular transparent and curving horizontal, low boxy MG: Tall, thin
Line	FG: Horizontal BG: irregular, undulating	FG: Digitate edges MG to BG: Not distinguishable	FG: complex geometric angular, horizontal, and vertical; straight MG: vertical
Color	FG: light brown, beige BG: Dark brown and purple due to atmospheric conditions	FG: Green, olive green; browns, tans	FG/MG: dull grey, Brown, light grey, green
Texture	FG: Fine BG: Fine	FG: medium to coarse grain, medium density	FG/MG: fine to medium grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Level	FG : Clumped; Spherical	FG: tall vertical narrow columnar, horizontal arms, diagonal, and curving (conductors)
Line	FG: Horizontal	FG: Digitate edges	FG: bold vertical and horizontal
Color	FG: Beige, tans	FG: Green, olive green; browns, tans	FG: dull grey, light grey
Texture	FG: Fine to medium grain	FG: medium to coarse grain, medium density	FG: fine grain matted uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x			x				x		
	Line		x				x				x		
	Color		x				x				x		
	Texture			x			x				x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluators Names:
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project within a heavily developed landscape associated with a residential/industrial complex south of Tucson. The Project would cross flat land with a level view. Construction access disturbance to landform and vegetation would be visible from the KOP as the Project would be seen from less than 0.1 mile and would introduce moderate contrast into the landscape for structure elements because of surrounding development and an existing transmission line in the view.

View northwest from residences in Tucson, Arizona

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU18 Gates Pass Road	Township: 14S	
VRM Class: NA	Range: 12E Section: 12	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Gently sloping to valley floor, flat BG: Complex, rugged (mountain)	FG: Clumped, individual vertical, "V"-shaped, low rough spherical MG: Intermittent patches, stippled	FG/MG: Geometric, rectangular; vertical
Line	FG/MG: Horizontal BG: Irregular, mountainous silhouettes	FG/MG: Irregular, complex	FG/MG: Vertical, horizontal, diagonal
Color	FG/MG: Tans and browns BG: Brown; blue hues caused by atmospheric conditions	FG/MG: Olive greens, browns, greens	FG/MG: Tan-pink, browns, whites, grays, whites
Texture	FG/MG: Fine grain BG: Medium to fine grain	FG/MG: Medium to fine grain	FG/MG: Complex and dense, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Weak, thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a highly modified landscape setting in the Tucson area, as viewed from Gates Pass Road. The Project would cross flat terrain however existing development would dominate the view and obscure project contrast. If visible, the structures would be seen at approximately 3.5 miles, and would likely blend into the modified landscape setting. The viewing distance, in consideration of the Project occurring in a backdropped condition in a highly modified landscape, would result in an overall weak degree of contrast from this KOP.

View to the northeast from Gates Pass Road.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 14S	
Key Observation Point: TU19 Santa Cruz River Park/Anza National Historic Trail	Range: 13E	
VRM Class: NA	Section: 2	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Level; trapezoidal (channel) MG: Flat BG: Pyramidal and trapezoidal	FG : Strip and clumped, numerous, tall	FG: Tall, vertical, geometric, triangular, transparent; curving horizontal, short, repeating, vertical with horizontal, low cubical MG: Tall, thin
Line	FG: Horizontal, angular, curving band BG: Irregular, horizontal silhouette	FG: Butt edge (in wash)	FG: Complex, angular, horizontal, vertical MG: Vertical, horizontal
Color	FG: Brown, dark brown BG: Blue due to atmospheric conditions	FG: Green, olive green, brown, golden	FG/MG: Dull gray, brown, light gray, light red
Texture	FG: Fine to medium grain BG: Fine grain	FG: Medium to coarse grain, medium density	FG/MG: Fine to medium grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Level; trapezoidal (channel)	FG : Strip and clumped	FG: Tall, vertical, geometric, narrow columnar, horizontal arms, diagonal, and curving (conductors)
Line	FG: Horizontal	FG: Butt edge	FG: Bold, vertical; concave, horizontal
Color	FG: Brown, dark brown	FG: Green, olive green, brown, golden	FG: Dull gray
Texture	FG: Fine to medium grain	FG: Medium to coarse grain, medium density	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x			x		x			
	Line			x				x		x			
	Color			x					x		x		
	Texture			x					x		x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No – See Simulation 43

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a highly modified landscape setting along the Santa Cruz River Parkway in Tucson. The proposed Project would cross flat terrain within the channelized Santa Cruz River. Construction access would occur within the Santa Cruz River channel and would introduce weak contrast to landform and vegetation for elements of line, color, and texture. The proposed structures would be seen in the immediate foreground paralleling similar existing transmission line structures. However, the proposed structures would be larger than the existing structures and would introduce strong structure contrast to form and line, with moderate contrast introduced for color and texture. The viewing distance, in consideration of the presence of existing similar structures in a modified landscape setting, would result in an overall moderate-strong degree of contrast from this KOP.

View to the south from the Santa Cruz River Parkway in Tucson, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 13S	
Key Observation Point: TU20 Sky Island National Scenic Byway	Range: 15E	
VRM Class: NA	Section: 26	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Gently sloping to valley floor, flat	FG: Clumped, individual, vertical, "V"-shaped; low, rough, spherical MG: Intermittent patches, stippled	FG/MG: Geometric, rectangular, thin vertical
Line	FG/MG: Horizontal, straight bands (road)	FG/MG: Irregular, complex	FG/MG: Vertical, horizontal
Color	FG/MG: Tans and browns, gray, white (road)	FG/MG: Olive greens, browns, greens	FG/MG: Tan, browns, whites, green, yellow (signs)
Texture	FG/MG: Fine grain	FG/MG: Medium to fine grain	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Weak, thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a highly modified landscape setting along the Sky Island Scenic Byway (Catalina Highway). The Project would cross flat terrain and would be backdropped by existing development. The structures may be visible at approximately 3.6 miles, but would likely blend into the landscape; however, they have the potential to introduce weak structure contrast to form, line, color, and texture. The viewing distance, in consideration of the Project occurring in a backdropped condition in a highly modified setting, would result in an overall weak degree of contrast introduced from this KOP.

View to the southwest from the Sky Island National Scenic Byway.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU21 Mehl Park Residence	Township: 13S	
VRM Class: NA	Range: 14E Section: 27	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Level; trapezoidal channel MG: Gently rolling BG: Rugged	FG/MG: Not distinctive	FG: Narrow, long, tall; low, thin, paralleling, horizontal, and vertical MG: Square, rectangular
Line	FG: Horizontal, curving band (path) MG: Undulating, horizontal BG: Broken, irregular, jagged, horizontal	FG/ MG: Regular, complex	FG: Straight, repeating, rhythmic (fence); tall, thin; long, numerous, low, rectangular MG: Geometric, horizontal, and vertical
Color	FG /MG: Brown, dark brown BG: Browns	FG/ MG: Green, olive green, brown, golden	FG: Gray, light gray, brown MG: Dull brown, white, beige
Texture	FG: Fine grain MG/ BG: Fine to medium grain	FG /MG: Medium grain, dense	FG: Fine MG: Medium

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, narrow, columnar, horizontal arms, diagonal, and curving (conductors)
Line	NA	NA	FG: Bold, vertical, horizontal; weak, concave (lines/wire)
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features: Landform/Water Body				Features: Vegetation				Features: Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No – See Simulation 44

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a modified landscape setting associated with Mehl Park in Tucson, Arizona. The proposed Project would cross flat terrain while immediately adjacent to existing residences and recreation viewers in Mehl Park. Disturbance to landform and vegetation associated with construction access would not be visible from the KOP because of vegetation screening. The proposed structures would be seen in the immediate foreground and would parallel existing transmission lines. However, the proposed structures would be larger and would introduce strong structure contrast to form and line, with moderate contrast introduced for color and texture. The viewing distance with consideration for the presence of existing similar structures in a modified landscape setting would result in an overall moderate-strong degree of contrast from this KOP.

View to the northeast from along a walking path within Mehl Park in Tucson, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 13S	
Key Observation Point: TU22 River Road	Range: 14E	
VRM Class: NA	Section: 21	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Level band (road), geometric mass MG: Slightly undulating BG: Bold, jagged	FG/MG: Low, irregular, patches	FG/MG: Thin tall, rectangular
Line	FG: Horizontal, curving, diagonal MG: Horizontal BG: Irregular, horizontal	FG/MG: Low, irregular, broken; butt edge (at road)	FG/MG: Vertical, diagonal, horizontal
Color	FG: Tan; gray, white (road) MG/BG: Brown; red	FG/MG: Dull green, olive green	FG/MG: Grays, browns; green and white (signs)
Texture	FG: Fine grain MG/BG: Fine grain	FG/MG: Medium grain and density, clumped	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, narrow, columnar, horizontal arms, diagonal, and curving (conductors)
Line	NA	NA	FG: Bold, vertical, horizontal; weak, concave (lines/wires)
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x		x		
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project within a highly modified landscape setting along River Road in Tucson, Arizona. The proposed Project would cross relatively flat terrain and would be viewed in context with existing vertical structures and development. Disturbance to landform and vegetation associated with construction access would not be visible from the KOP because of vegetative screening. The proposed structures would be partially screened by vegetation associated with the river, approximately 0.2 mile, and would result in strong contrast. The viewing distance in consideration of intermittent screening would result in an overall moderate-strong degree of contrast from this KOP.

View to the southeast from River Road in Tucson, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU23 Oracle Road	Township: 13S	
VRM Class: NA	Range: 13E	
	Section: 11	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Flat to gently sloping	FG/MG: Medium height, "V"-shaped, grouped/ strip	FG/MG: Geometric, low, rectangular (buildings), thin, vertical
Line	FG/MG: Horizontal, diagonal bands (roads)	FG/MG: Butt edges at road and structures	FG/MG: Vertical, weak, broken horizontal
Color	FG/MG: Tans, browns, gray, white	FG/MG: Olive greens, dark brown	FG/MG: Tan, browns, whites, green
Texture	FG/MG: Fine grain, smooth	FG/MG: Medium grain	FG/MG: Medium to fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a highly modified landscape setting in the Tucson area, as viewed from Oracle Road. The Project would cross flat terrain and would be backdropped and partially screened by development and vegetation. Construction disturbance to the landform and vegetation associated with access would not be visible due to screening by development and vegetation. The structures would be seen at approximately 1.4 miles and would likely blend into the landscape setting; however, they have the potential to introduce weak structure contrast to form, line, color, and texture.

View to the south along Oracle Road (southbound).

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU24 Silverbell Road Residence	Township: 13S Range: 13E Section: 7	
VRM Class: NA		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Sloped, mounds with flat tops MG: Bold complex irregular pyramidal	FG: Individual and grouped, low, spherical, clumped	FG: Tall, narrow, cylindrical, rectangular; narrow, horizontal
Line	FG: Curving band (road), horizontal; geometric, diagonal MG: Bold, complex, irregular, horizontal, diagonal	FG: Weak, butt edge; indistinguishable	FG: Vertical, horizontal, diagonal
Color	FG: Light to dark gray (road); light brown, reddish brown MG: Grays, light green and brown	FG: Light to dark green, golden, brown, reds	FG: White, brown, reds, tans, white, blue
Texture	FG: Fine to medium grain BG: Medium grain	FG: Medium grain; random, medium density	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Flat	FG: Individual and grouped, low, spherical, clumped	FG: Tall, vertical, geometric, narrow, columnar, horizontal arms
Line	FG: Weak, horizontal	FG: Weak, butt edge; indistinguishable	FG: Bold, vertical, horizontal; weak, concave (lines/wires)
Color	FG: Light brown, reddish brown	FG: Light to dark green, golden, brown, reds	FG: Dull gray
Texture	FG: Fine grain	FG: Medium grain; random, medium density	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x		x			
	Line			x				x			x		
	Color			x				x				x	
	Texture			x				x			x		

Does project design meet visual resource management objectives?
NA

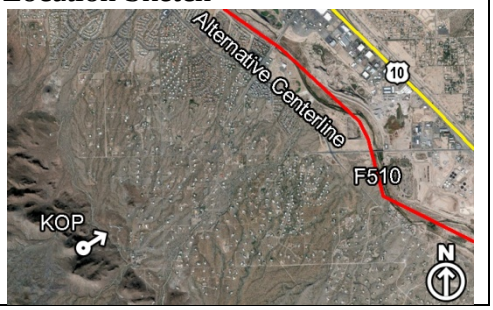
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a highly modified landscape setting associated with residences near Silverbell Road in Tucson, Arizona. The proposed Project would cross relatively flat terrain and would be partially backdropped by existing terrain. Disturbance associated with construction access would be partially visible and would introduce weak contrast for the landform and vegetation elements of form, line, color, and texture. The proposed structures would be seen at approximately 0.2 mile and viewed in text with existing transmission lines. The proposed structures would be larger than the existing structures and would introduce strong contrast for structure elements of form, with moderate contrast for line and texture, and weak contrast for color introduced. The presence of existing similar structures, with consideration for the proposed Project occurring in a highly modified landscape setting, would result in an overall moderate-strong degree of contrast.

View to the northeast from residences along West Sunset Road (overlooking Silverbell Road) in Tucson, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU25 Saguaro National Park (West)	Township: 13S Range: 12E Section: 4	
VRM Class: NA		

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Gently to moderately rolling MG: Relatively flat, level BG: Bold, rugged	FG: Low, indistinct; tall, narrow MG: Irregular massing and patches BG: Amorphous patches near peak	FG/MG: Low geometric (sign) and low, individual geometric, rectangular (buildings)
Line	FG: Undulating and descending band (road) MG: Horizontal BG: Irregular, strong, horizontal, complex	FG: Butt edge (at road) MG: Irregular, weak transitional edges BG: Weak digitate edge	FG/MG: Multiple broken horizontal and vertical
Color	FG: Tan, browns, gray, yellow, white MG: Tan, browns BG: Brown, dark brown, reddish-brown	FG: Variations of green MG: Uniform green, patches of dark green BG: Dulled blue-green	FG/MG: White, grays, tans, browns
Texture	FG: Fine to medium grain MG: Fine grain BG: Fine to medium grain	FG: Medium grain MG: Medium to fine grain BG: Fine grain	FG: Medium grain, random

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

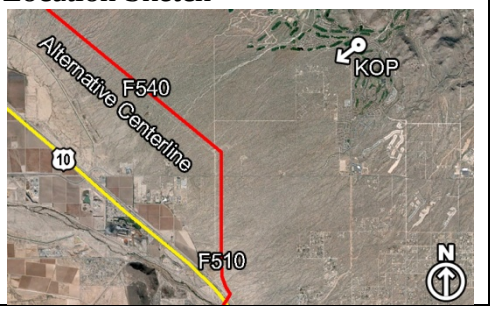
Additional mitigating measures recommended?
No – See Simulation 45

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a highly modified feature landscape setting in the Tucson area and viewed from the Saguaro National Park (west). The Project would cross flat terrain in however existing development would dominate the view and obscure project contrast. If visible, the proposed structures would be seen at 2.8 miles and would likely blend into the highly modified landscape setting. The viewing distance with consideration of the Project, backdropped by a modified landscape setting, would result in an overall weak degree of contrast from this KOP.

View to the northeast from Picture Rocks Road within Saguaro National Park (West).

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project** **Key Observation Point:** TU26 Ritz-Carlton Resort **VRM Class: NA**	**Location:** Township: 11S Range: 12E Section: 24	Location Sketch 

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Gently rolling to flat valley floor BG: Complex, layered, rugged; pyramidal	FG/MG: Grouped, medium height; "V"-shaped, rounded, stippled BG: Regular	FG/MG: Geometric, rectangular, thin vertical
Line	FG/MG: Horizontal, band (road) BG: Irregular horizontal silhouettes	FG/MG: Irregular, complex	FG/MG: Vertical, horizontal, straight, repeating
Color	FG/MG: Tans; gray (road) BG: Dark brown; blue hues caused by atmospheric conditions	FG/MG: Olive greens, browns, greens; yellow-green	FG/MG: Tan/pink, browns, grays, tans
Texture	FG/MG: Fine grain BG: Fine grain	FG/MG: Irregular, medium coarseness	FG/MG: Complex and dense

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Weak, vertical
Line	NA	NA	MG: Repeating, vertical across the horizon line
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

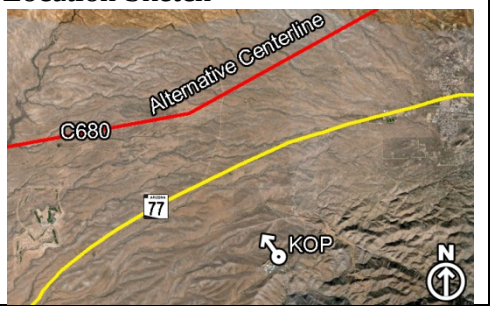
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a highly modified landscape setting viewed from the Ritz-Carlton Resort, north of Tucson. The Project would cross flat terrain and would be backdropped by terrain for recreation viewers at the resort with superior views. The structures may be visible at approximately 3.5 miles, but would likely blend into the landscape setting. The viewing distance, in consideration of the Project occurring in a backdropped condition in a highly modified setting, would result in an overall weak degree of contrast from this KOP.

View to the southwest from a service road adjacent to the Ritz-Carlton Resort.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project** **Key Observation Point:** TU27 Biosphere 2 **VRM Class: NA**	**Location:** Township: 10 S Range: 14 E Section: 12	Location Sketch 

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Slightly sloping, converging plains (drainage)	FG: Individual, low, spherical and rectangular patch/strip (in drainage)	NA
Line	FG: Simple, undulating horizontal	FG: Band, transitional edge and stippled	NA
Color	FG: Reddish brown and light brown	FG: Light greens, gold, light and dark brown	NA
Texture	FG: Fine grain	FG: Uneven, medium grain, medium to high density	NA

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Thin, vertical
Line	NA	NA	MG: Vertical
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

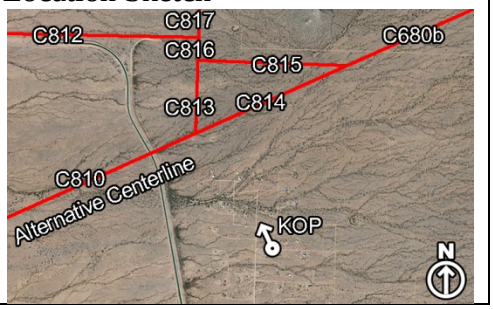
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a panoramic landscape setting associated with views from Biosphere 2. The proposed Project would cross rolling terrain and would be screened by vegetation or topography for viewers at Biosphere 2. Landform and vegetation in the foreground would provide screening for disturbance to landform and vegetation, and potentially the proposed structures. The proposed structures would occur approximately 3.0 miles from the KOP and, if visible, weak contrast for structure elements of form, line, color, and texture could be introduced into the landscape. The landform and vegetative screening of the Project and the distance of the Project from the viewer would result in an overall weak degree of contrast from this KOP.

View to the northwest from the parking lot of Biosphere 2.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU28 Longhoen Trail Residence (Red Rock)	Township: 10S	
VRM Class: III (KOP from Private Land)	Range: 11E Section: 7	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat MG: Bold, few pyramidal	FG: Numerous short, clumped, rough, spherical, and tall columnar	FG: Few low rectangular, tall thin vertical, triangular transparent
Line	FG: Weak horizontal MG: Bold, complex, jagged, broken	FG: Diffuse edge	FG: Repeating vertical, complex geometric, angular
Color	FG: Reddish brown to light brown MG: Dulled reddish brown and grey	FG: Light to dark greens, light to dark browns	FG: Light green, tan, white, dulled pink, dull gray
Texture	FG: Fine grain MG: Medium grain	FG: Medium/coarse grain, medium density	FG: Fine grain and matted uniform

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall thin vertical, triangular, transparent
Line	NA	NA	FG: Repeating vertical, complex, geometric, angular/horizontal
Color	NA	NA	FG: Brown, dull, gray
Texture	NA	NA	FG: Fine grain, matted, uniform

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
Yes

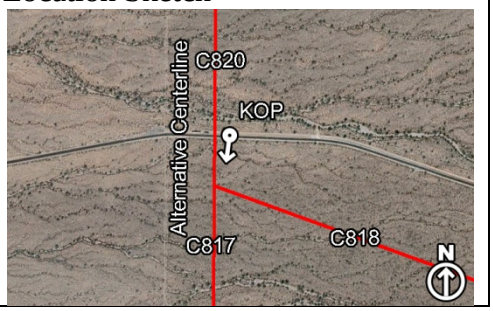
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak-moderate contrast would result from the construction and operation of the proposed Project in a highly modified landscape setting with VRM Class III designation, as viewed from residences near Red Rock. The proposed Project would cross relatively flat to slightly rolling land and would be partially backdropped by terrain and access for construction would be screened by vegetation. The Project would be seen at 1.0 mile and viewed in context with existing transmission lines visible at approximately 0.8 mile. The proposed structures would introduce moderate contrast for form and line, with weak contrast for color and texture introduced into the landscape. The presence of a similar project, in consideration with portions of the Project partially backdropped, would result in an overall weak-moderate degree of contrast from this KOP.

View to the northwest from residences near Red Rock, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project**	**Location:**	Location Sketch
Key Observation Point: TU29 Park Link Drive	Township: 9S	
VRM Class: III	Range: 11E	
	Section: 30	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat to gently rolling; simple rounded, pyramidal	FG: Numerous, short and tall, irregular patches; rough, spherical and tall columnar	NA
Line	FG: Straight, horizontal; irregular, diagonal	FG: Weak, diffuse edge	NA
Color	FG: Light brown, reddish brown	FG: Light to dark green, light to dark brown, gray	NA
Texture	FG: Fine grain	FG: Medium to coarse grain, dense	NA

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, triangular, transparent
Line	NA	NA	FG: Complex, angular; concave, horizontal
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
Yes

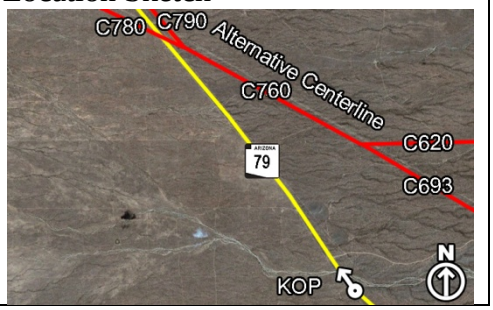
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project in a panoramic landscape setting with VRM Class III designation along Park Link Drive. The proposed Project would cross relatively flat terrain and would be partially backdropped by existing terrain for travel route viewers with level views. Existing vegetation would provide screening for disturbance associated with construction access. The proposed structures would be seen at approximately 0.2 mile and would introduce moderate-strong contrast into the landscape for form, line, and color, with moderate contrast introduced to texture. Overall a moderate-strong level of contrast is anticipated from this KOP because the project would be viewed in close proximity. Selective mitigation measure #10 (maximize span at crossing) will reduce contrast in this area.

View to the south from Park Link Drive.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 7S	
Key Observation Point: TU30 Pinal Pioneer Parkway (SR 79)	Range: 11E	
VRM Class: NA	Section: 36	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat	FG: Numerous, clumped, amorphous and few, tall, narrow, columnar	FG: Repeating, thin, vertical
Line	FG: Continuous, diagonal, narrow band (road)	FG: Butt, transitional edge	FG: Vertical and horizontal
Color	FG: Light brown; gray, yellow, and white (road)	FG: Light to dark greens, golden, light to dark brown	FG: Brown
Texture	FG: Fine grain	FG: Uneven, medium to coarse grain, dense	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Weak, thin, vertical
Line	NA	NA	FG: Vertical
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

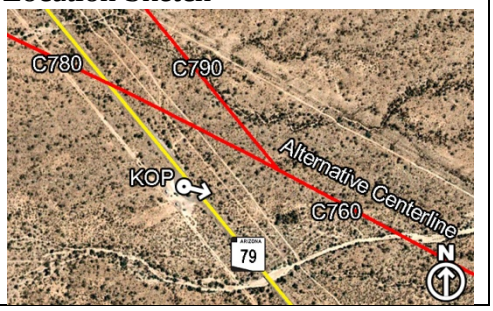
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a panoramic landscape setting along SR 79 (Pinal Pioneer Parkway). The proposed Project would cross flat terrain with some vegetation screening for travel route viewers along SR 79 with level views. Disturbance to landform and vegetation would not be visible from the KOP because of the vegetative screening. The proposed structures would be visible as the Project crosses Pinal Pioneer Parkway at approximately 3.2 miles and would be viewed in context with an existing transmission line resulting in weak contrast. The viewing distance from this KOP would result in an overall weak degree of contrast.

View to the northwest from SR 79 (Pinal Pioneer Parkway).

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location**	Location Sketch
SunZia Southwest Transmission Project	Township: 7S	
Key Observation Point: TU31 Tom Mix Memorial/Rest Area	Range: 11E	
VRM Class: NA	Section: 15	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat, level; narrow linear strip (road)	FG: Numerous, amorphous patches; few, tall, narrow, columnar	FG: Repeating, tall, thin, vertical, rectangular element; short cylindrical
Line	FG: Straight; horizontal, paralleling (road); perpendicular, short band	FG: Straight, butt edge (at road)	FG: Vertical, horizontal, diagonal
Color	FG: Light brown, light reddish brown; gray, yellow, white (road)	FG: Light to dark green, golden, light to dark brown	FG: Brown, gray, white
Texture	FG: Fine grain	FG: Uneven, medium to coarse grain; medium to high density	FG: Fine to medium grain, even, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, triangular, transparent
Line	NA	NA	FG: Complex, angular; concave, horizontal
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x	x			
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

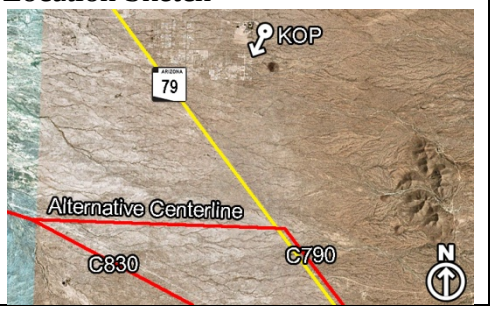
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a panoramic landscape setting viewed from the Tom Mix Memorial and rest area. The proposed Project would cross flat terrain and would be viewed in context with existing transmission lines. Construction access would not be visible from this KOP due to vegetation screening in the foreground. The proposed structures would be seen at approximately 0.15 mile behind existing similar transmission lines which parallel SR 79. The proposed structures would be larger and would introduce strong contrast to form, line, and color, with moderate contrast introduced for texture.

View to the southeast from the Tom Mix Memorial and rest area located off of Pinal Pioneer Parkway.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 6S	
Key Observation Point: TU32 St. Anthony's Greek Orthodox Monastery	Range: 11E	
VRM Class: NA	Section: 7	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Flat BG: Definite, rugged, pyramidal	FG/MG: Numerous, clumped rough, spherical; numerous columnar to expansive patch	FG: Low, rectangular
Line	FG/MG: Bold, simple, continuous, horizontal BG: Broken, rugged horizontal	FG: Weak, transitional edge	FG: Weak, broken horizontal, vertical
Color	FG/MG: Light to medium brown, reddish brown BG: Dulled blue-grays	FG/MG: Light to dark greens, tan, light to dark brown	FG: Light red, gray, light yellow, dulled light blue
Texture	FG/MG: Fine grain BG: Medium grain	FG/MG: Medium grain and density	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	MG: Weak, vertical
Line	NA	NA	MG: Repeating, vertical across the horizon line
Color	NA	NA	MG: Dull gray
Texture	NA	NA	MG: Fine grain, even, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

Degree of Contrast		Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x			x	
	Line				x				x			x	
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

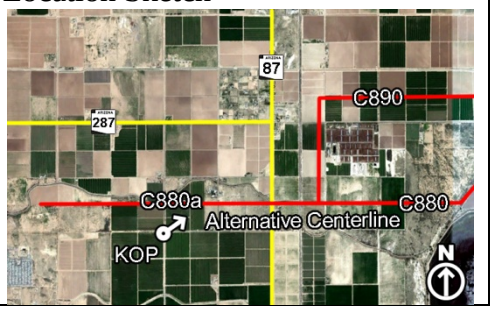
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Weak contrast would result from the construction and operation of the proposed Project in a panoramic landscape setting viewed from St. Anthony's Greek Orthodox Monastery. The Project would cross flat terrain with cultural modifications associated with existing residences. The existing vegetation is diverse and varies by individual plant form and height, but provides screening for disturbance vegetation associated with construction access. The proposed structures would be seen at approximately 3.2 miles across the horizon line and would introduce weak structure contrast for line, form, color, and texture into the landscape. The viewing distance of the proposed Project from this KOP would result in an overall weak degree of contrast.

View to the southwest from an overlook at St. Anthony's Greek Orthodox Monastery.

VISUAL CONTRAST RATING WORKSHEET

Project Name: **SunZia Southwest Transmission Project** **Key Observation Point:** TU33 Earley Road Residence **VRM Class: NA**	**Location:** Township: 6S Range: 8E Section: 28	Location Sketch 

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG/MG: Flat, level; narrow, linear (road)	FG/MG: Low, geometric and linear forms created by agricultural fields; individual and patches, tall spherical, pyramidal	FG/MG: Numerous, tall, thin, low cubical
Line	FG/MG: Straight, horizontal; paralleling bands converging towards the horizon (road)	FG/MG: Horizontal, irregular; straight, butt edge (at road)	FG/MG: Vertical, horizontal
Color	FG/MG: Light brown; gray (road)	FG/MG: Dark green, green, brown, golden	FG/MG: White, gray, brown
Texture	FG/MG: Fine grain	FG/MG: Fine to medium grain, medium density	FG/MG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG/MG: Tall, vertical, geometric, narrow, columnar, horizontal arms
Line	NA	NA	FG/MG: Bold, vertical, angular; concave, horizontal
Color	NA	NA	FG/MG: Dull gray
Texture	NA	NA	FG/MG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x	x			
	Texture				x				x	x			

Does project design meet visual resource management objectives?
NA

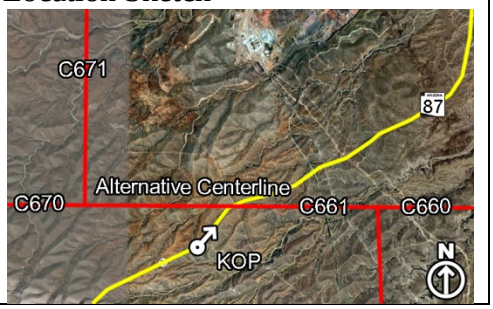
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Strong contrast would result from construction and operation of the proposed Project within a modified panoramic landscape setting associated with residences along Earley Road, near La Palma, Arizona. The proposed Project would cross flat terrain associated with agricultural development. Disturbance to the landform and vegetation would not be visible from the KOP. The proposed structures would be seen from approximately 0.4 mile and would be viewed in context with similar existing transmission lines. The proposed structures would be larger than the existing structures and would introduce strong contrast to form, line, color, and texture. The viewing distance with consideration for the amount of structures visible from the KOP would result in an overall strong degree of contrast.

View to the northeast from residences along Earley Road near La Palma, Arizona.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 9S	
Key Observation Point: TU34 SR 77 (south)	Range: 16E	
VRM Class: NA	Section: 15	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Low, rolling; flat, linear (road) BG: Rugged, amorphous mass	FG: Numerous, individual, low, spherical	FG: Narrow, tall, vertical
Line	FG: Diagonal, rounded: paralleling bands converging towards the horizon (road) BG: Complex irregular horizontal	FG: Straight, butt edge (at road)	FG: Vertical, thin
Color	FG: Gray, yellow, white, light brown, reddish brown BG: Browns/tans	FG: Light to dark green, brown, reds	FG: Light brown
Texture	FG/BG: Fine grain	FG: Medium grain, medium density, uneven, random	FG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Low rolling	FG: Numerous, individual, low, spherical	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Weak, broken, diagonal	FG: Butt edge from band	FG: Complex, angular; concave, horizontal
Color	FG: Light brown, reddish brown	FG: Light to dark green, brown, reds	FG: Dull gray
Texture	FG: Fine grain	FG: Medium grain, medium density, uneven, random	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form			x				x		x			
	Line			x				x		x			
	Color			x					x		x		
	Texture			x					x	x			

Does project design meet visual resource management objectives?
NA

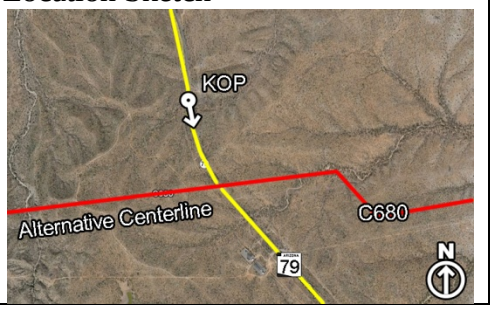
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from construction and operation of the proposed Project within a focal landscape setting associated with views along SR 77. The proposed Project would cross rolling terrain in a partially backdropped condition from a superior view. Some disturbance associated with construction access and tower pads would be visible from the KOP and would introduce weak contrast to landform and vegetation elements of form, line, color, and texture. Structures would be seen at approximately 0.4 mile and would introduce strong structure contrast to form, line, and texture, with moderate contrast introduced for color. Visibility of access in rolling terrain and crossing of SR 77 would result in an overall strong level of contrast for travel route viewers. Selective mitigation measure #10 (maximize span at crossing) would reduce contrast at this crossing.

View to the northeast from SR 77.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 9S	
Key Observation Point: TU35 Pinal Pioneer Parkway (SR 79)	Range: 13E	
VRM Class: NA	Section: 34	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Gently rolling; flat, linear (road) BG: Bold, irregular, jagged	FG: Strip, numerous, low, individual	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Undulating; paralleling bands converging towards the horizon (road) BG: Broken, complex, triangular, horizontal	FG: Slightly curving, butt edge (at road)	FG: Complex, angular; convex, horizontal
Color	FG/BG: Brown; gray, white, yellow (road)	FG: Light to dark green, tan, brown, golden	FG: Dull gray
Texture	FG/BG: Fine grain	FG: Medium grain and density, uneven, random	FG: Fine grain, matted, uniform, ordered

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, triangular, transparent
Line	NA	NA	FG: Complex, angular; concave, horizontal
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

	Degree of Contrast	Features											
		Landform/ Water Body				Vegetation				Structures			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x		x		
	Line				x				x		x		
	Color				x				x			x	
	Texture				x				x			x	

Does project design meet visual resource management objectives?
NA

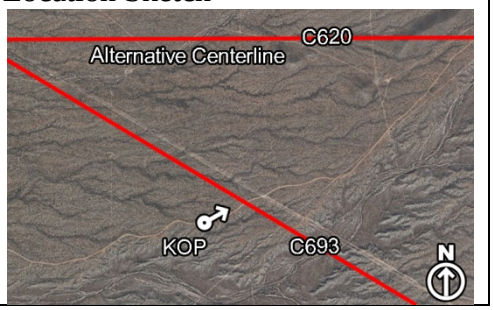
Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Low-moderate contrast would result from construction and operation of the proposed Project within a modified landscape setting associated with views from SR 79. The proposed Project would cross foothills in gently rolling terrain and would be partially backdropped by existing terrain for viewers along SR 79 with inferior views. Disturbance similar to what would be used for construction access of the proposed Project already exists and is not visible from the KOP. The proposed structures would be seen at approximately 0.4 mile, paralleling existing similar structures that are visible at approximately 0.5 mile with other similar, much smaller structures (distribution lines) visible perpendicular to the proposed Project. The proposed structures would be larger than the existing structures and would introduce low-moderate contrast to form, line, color, and texture. The viewing distance in a partially backdropped condition with consideration for the presence of similar structures would result in an overall moderate degree of contrast from this KOP.

View to the southeast from SR 79.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 7S	
Key Observation Point: TU36 Freeman Road	Range: 16E	
VRM Class: III	Section: 32	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat BG: Pyramidal	FG: Amorphous, patches; individual, tall, narrow	NA
Line	FG: Bold, curving band; horizontal BG: Irregular, broken, horizontal	FG: Slightly curving, butt edge (at road)	NA
Color	FG: Light brown, reddish brown BG: Greenish-blue, light reddish brown	FG: Light to dark green, tan, brown	NA
Texture	FG/BG: Fine grain	FG: Coarse grain, medium density, random, uneven	NA

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	NA	NA	FG: Tall, vertical, geometric, triangular, transparent
Line	NA	NA	FG: Complex, angular; concave, horizontal
Color	NA	NA	FG: Dull gray
Texture	NA	NA	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x				x	x			
	Line				x				x	x			
	Color				x				x		x		
	Texture				x				x		x		

Does project design meet visual resource management objectives?
Yes

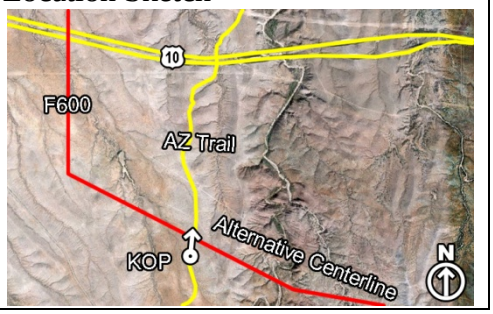
Additional mitigating measures recommended?
Yes

Evaluator Name(s):
EPG Visual Personnel

Moderate-strong contrast would result from the construction and operation of the proposed Project within a panoramic landscape setting with VRM Class III designation along Freeman Road. The proposed Project would cross low rolling to flat terrain. Disturbance associated with construction access to landform and vegetation will not be visible because of existing vegetation which would provide screening. The proposed structures would be seen at 0.5 mile and would introduce strong structure contrast for form and line, with moderate contrast introduced for color and texture. Selective mitigation measure #10 (maximize span at crossing) would reduce contrast at this crossing.

View to the northeast from Freeman Road.

VISUAL CONTRAST RATING WORKSHEET

Project Name:	**Location:**	Location Sketch
SunZia Southwest Transmission Project	Township: 17S	
Key Observation Point: TU37 Arizona National Scenic Trail – Davidson Canyon	Range: 17E	
VRM Class: NA	Section: 6	

Characteristic Landscape Description

	Landform/Water	Vegetation	Structures
Form	FG: Flat, low rolling; flat, linear (trail) BG: Complex pyramidal	FG: Numerous, low, individual, spherical, amorphous patches	FG: Numerous, tall, "H" shaped
Line	FG: Undulating, horizontal; thin, paralleling bands, gently curving (trail) BG: Irregular, horizontal	FG: Transitional edge	FG: Vertical, horizontal, diagonal
Color	FG: Light brown BG: Atmospheric, greenish-blues	FG: Light to dark green, purples, browns, golden	FG: Brown
Texture	FG/BG: Fine to medium grain	FG: Coarse to medium grain, medium density	FG/BG: Fine grain

Proposed Activity Description (Facility)

	Landform/Water	Vegetation	Structures
Form	FG: Flat, low rolling	FG: Numerous, low, individual, spherical, amorphous patches	FG: Tall, vertical, geometric, triangular, transparent
Line	FG: Undulating, horizontal	FG: Transitional edge	FG: Complex, angular; concave, horizontal
Color	FG: Light brown	FG: Light to dark green, purples, browns, golden	FG: Dull gray
Texture	FG: Fine grain	FG: Coarse grain, random medium density	FG: Fine grain, matted, uniform, ordered

Distance Zones - FG: Foreground, MG: Middleground, BG: Background

Degree of Contrast

		Features											
		Landform/ Water Body				Vegetation				Structures			
Degree of Contrast		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form				x			x		x			
	Line			x				x		x			
	Color			x					x	x			
	Texture				x				x		x		

Does project design meet visual resource management objectives?
NA

Additional mitigating measures recommended?
No

Evaluator Name(s):
EPG Visual Personnel

Strong contrast would result from construction and operation of the proposed Project in a panoramic landscape setting viewed from Davidson Canyon Trail (part of the Arizona National Scenic Trail). The proposed Project would cross low rolling terrain. Existing disturbance for construction access of the proposed Project already exists and would not be visible from the KOP; however, disturbance for spur roads and tower pads would be visible and would introduce weak contrast for landform and vegetation elements of line and color. The proposed structures would be seen at approximately 0.25 mile, paralleling existing similar structures that are visible at approximately 0.4 mile. The proposed structures would be larger than the existing structures and would introduce strong contrast to form, line, and color, with moderate contrast introduced for texture. The viewing distance of the proposed structures in a partially backdropped condition would result in an overall strong degree of contrast from this KOP.

View to the north from the Davidson Canyon Trail.